Pleas amend the application as follows:

In the Claims:

Cancel claims 1 to 11 and 14 to 16 such that the claim set reads as follows:

1. to 11. (Cancelled)

12. (Previously presented) A hydrogen generating system for use in an internal combustion engine of a vehicle for increasing the efficiency of the engine and decreasing emissions from the engine, the hydrogen generating system comprising:

a plurality of modules, each module containing an electrolysis cell for generating hydrogen and oxygen gases by electrolysis of an aqueous solution; a power regulator for providing regulated electrical power to the electrolysis cell, the power regulator generating an AC component;

an outlet flow means for introducing the generated gases from the cells into the intake manifold system of the internal combustion engine;

a monitoring means for monitoring the operating conditions of the hydrogen generating system;

a control means in communication with the monitoring means and adapted to control the operation of the hydrogen generating system in response to the monitoring means; and

wherein the AC component of the power regulators are phase locked with a selected module acting as the master module and a selected others of the modules acting as slave modules.

13. (Previously presented) The hydrogen generating system of claim 18 wherein the controller is a subroutine in the control means.

14. to 16. (cancelled)

17. (previously presented) The hydrogen generating system of claim 12 wherein each module contains phase locking circuitry, the phase locking circuitry of the master module generating a chopping frequency and inputting the chopping frequency to the slave modules.

18. (previously presented) The hydrogen generating system of claim 12 further comprising a controller selected to prevent the operation of any slave modules not phase locked with the master module.

19. (previously presented) The hydrogen generating system of claim 12 wherein the regulated electrical power includes a battery as a power source, the monitoring means includes a sensor for monitoring battery voltage and the control means includes means for comparing the battery voltage to a voltage indicative of proper alternator operation and controlling operation of the hydrogen generating system when the battery voltage is not indicative of proper alternator operation.

20. (previously presented) The hydrogen generating system of claim 19 wherein the control means is further adapted to indicate that the battery voltage is not indicative of proper alternator operation.

21. (previously presented) The hydrogen generating system of claim 12 wherein a module includes a plurality of additional electrolysis cells electrically connected in series with the electrolysis cell and wherein the monitoring means includes a sensor for monitoring the integrity of the output circuit from the power source and the control means includes means in communication with the sensor for controlling operation of the hydrogen generating system based on the integrity of the output circuit.

22. (previously presented) The hydrogen generating system of claim 21 wherein the electrolysis cell and the plurality of additional electrolysis cells includes a penultimate and last cells in the series and the sensor monitors the voltage in the electrical connection between the penultimate and last cells.

23. (previously presented) The hydrogen generating system of claim 21 wherein the sensor monitors current in the output circuit.